# **Command Summary and Syntax**

This section provides a list of all commands available with the Natural Debugger. An underlined portion of a keyword represents an acceptable abbreviation. For an explanation of more complex command structures with user-defined operands, see Syntax Diagrams below.

Below is information on:

- All Debug Commands
- Syntax Diagrams

# **All Debug Commands**

Command	Subcommand(s)	Explanation	
-		Scrolls one page down in a list.	
		Scrolls to the beginning of a list.	
TOP			
+		Scrolls one page down in a list.	
++		Scrolls to the end of a list.	
<u>BOT</u> TOM			
<u>AC</u> TIVATE	BREAKPOINT BP	Activates breakpoints as described in the relevant section in Breakpoint Maintenance.	
(syntax below)	<u>SP</u> Y	Activates breakpoints <b>and</b> watchpoints: see also Activate Spy in Spy Maintenance.	
	WATCHPOINT WP	Activates watchpoints as described in the relevant section in Watchpoint Maintenance.	
BREAK		Displays the Debug Window: see also BREAK in Navigation and Information Commands.	
<u>CA</u> NCEL		Cancels the current operation and/or exits screens without saving modifications.	
DBLOG	A Q D	Invokes the DBLOG utility (see the relevant documentation) from within the Natural Debugger.  To specify a database environment, use any of the subcommands provided:  A = Adabas (this is the default),  Q = SQL,  D = DL/I  Note:  During a debug interrupt, you can only specify any of the subcommands listed above.	

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Command	Subcommand(s)	Explanation	
DEACTIVATE <u>DA</u>	BREAKPOINT BP	Deactivates breakpoints as described in the relevant section in Breakpoint Maintenance.	
(syntax below)	<u>SP</u> Y	Deactivates breakpoints <b>and</b> watchpoints: see also Deactivate Spy in Spy Maintenance.	
	WATCHPOINT WP	Deactivates watchpoints as described in the relevant section in Watchpoint Maintenance.	
<u>DE</u> LETE	BREAKPOINT BP	Deletes breakpoints as described in the relevant section in Breakpoint Maintenance.	
(syntax below)	<u>SP</u> Y	Deletes breakpoints <b>and</b> watchpoints: see also Delete Spy in Spy Maintenance.	
	WATCHPOINT WP	Deletes watchpoints as described in the relevant section in Watchpoint Maintenance.	
	<u>EN</u> VIRONMENT	Deletes the specified debug environment: see also Delete Debug Environment in Debug Environment Maintenance.	
DISPLAY (syntax below)	BREAKPOINT BP	Displays breakpoints as described in the relevant section in Breakpoint Maintenance.	
	<u>SP</u> Y	Displays breakpoints <b>and</b> watchpoints: see also Display Spy in Spy Maintenance.	
	WATCHPOINT WP	Displays watchpoints as described in the relevant section in Watchpoint Maintenance.	
	CALL	Displays statistics on Natural objects invoked during the execution of an application: see also Display Called Objects in Call Statistics Information.	
	<u>EX</u> EC	Displays statistics on executed statement lines of invoked Natural objects: see also Display Executed Statement Lines in Statement Execution Statistics.	
	<u>HE</u> XADECIMAL	Displays the contents of variables in hexadecimal format.	
	<u>NOC</u> ALL	Displays statistics on Natural objects that have not been invoked during the execution of an application: see also Display Non-Called Objects in Call Statistics Information.	
	<u>NOEX</u> EC	Displays statistics on non-executed statement lines of invoked Natural objects: see also Display Non-Executed Statement Lines in Statement Execution Statistics.	
	<u>OBJ</u> ECT	Displays statistics on the call frequency of objects: see also Display All Objects in Call Statistics Information.	
	<u>ST</u> ATEMENT	Display statistics on executed and non-executed statement lines of invoked Natural objects: see Display All Statement Lines in Statement Execution Statistics.	
	<u>VA</u> RIABLE	Displays variables for interrupted Natural objects as described in the relevant section in Variable Maintenance.	
	<u>XSTAT</u> ISTICS	Displays a statistical summary of execution statistics: see also Display Statement Execution Statistics in Statement Execution Statistics.	

Command	Subcommand(s)	Explanation	
<u>ESC</u> APE	<u>B</u> OTTOM	Stops processing a loop and escapes to the first statement after the loop: see ESCAPE BOTTOM in Execution Control Commands.	
	ROUTINE	Stops processing an interrupted Natural object and continues with another object, if available: see ESCAPE ROUTINE in Execution Control Commands.	
<u>E</u> XIT		Leaves the current screen: see EXIT in Execution Control Commands.	
<u>F</u> LIP		Switches between the display of the two PF-key lines (PF1 to PF12 and PF13 to PF24).	
<u>G</u> O		Returns control to the execution of the interrupted Natural object: see GO in Execution Control Commands.	
LAST		Displays the command entered last. The last three commands are stored and can be recalled.	
<u>LE</u> FT		Shifts to the left side of a source code listing.	
<u>LI</u> ST		Displays the source code of a object.	
(syntax below)	<u>BR</u> EAK	Shows the object source with the current break. The relevant statement line is highlighted.	
	<u>LA</u> STLINE	Shows the object source with the last line executed before the current break.	
<u>LO</u> AD (syntax below)	<u>EN</u> VIRONMENT	Loads the debug environment specified: see Load Debug Environment in Debug Environment Maintenance.	
<u>ME</u> NU		Invokes the Debug Main Menu.	
MODIFY (syntax below)	BREAKPOINT BP	Modifies breakpoints as described in the relevant section in Breakpoint Maintenance.	
	<u>SP</u> Y	Invokes the Modify Breakpoint or Modify Watchpoint screen: see also Modify Spy in Spy Maintenance.	
	WATCHPOINT WP	Modifies watchpoints as described in the relevant section in Watchpoint Maintenance.	
	<u>HE</u> XADECIMAL	Modifies the contents of variables in hexadecimal format.	
	<u>VA</u> RIABLE	Invokes the Display Variable screen for modification as described in the relevant section in Variable Maintenance. See also Modify Variable.	
<u>NE</u> XT		Executes the next command specified for a breakpoint or watchpoint.	
<u>O</u> BJCHAIN		Displays executed objects at various program levels: see OBJCHAIN in Navigation and Information Commands.	
ON/OFF		Switches test mode on/off.	

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Command	Subcommand(s)	Explanation	
<u>PR</u> INT	CALL	Prints statistics on Natural objects invoked during the execution of an application: see also Display Called Objects in Call Statistics Information.	
(syntax below)	<u>EX</u> EC	Prints statistics on executed statement lines of invoked Natural objects: see also Display Executed Statement Lines in Statement Execution Statistics.	
	<u>NOC</u> ALL	Prints statistics on Natural objects that have not been invoked during the execution of an application: see also Display Non-Called Objects in Call Statistics Information.	
	<u>NOEX</u> EC	Prints statistics on non-executed statement lines of invoked Natural objects: see also Display Non-Executed Statement Lines in Statement Execution Statistics.	
	<u>OBJ</u> ECT	Prints statistics on the call frequency of objects: see also Display All Objects in Call Statistics Information.	
	<u>ST</u> ATEMENT	Prints statistics on executed and non-executed statement lines of invoked Natural objects: see also Display All Statement Lines in Statement Execution Statistics.	
	<u>XSTAT</u> ISTICS	Prints statistics on executed statement lines: see also Display Statement Execution Statistics in Statement Execution Statistics.	
PROFILE		Displays the Edit Profile screen where you can modify the profile of the Natural Debugger. For details on the Edit Profile screen, see the relevant section in Navigation and Information Commands.	
RESET (syntax below)	<u>EN</u> VIRONMENT	Resets the current debug environment: see Reset Debug Environment in Debug Environment Maintenance.	
<u>RI</u> GHT		Shifts to the right side of a source code listing.	
<u>RU</u> N		Switches off test mode and continues program execution.	
SAVE (syntax below)	<u>EN</u> VIRONMENT	Resets the current environment and saves the debug specifications. See also Save Debug Environment in Debug Environment Maintenance.	
<u>SC</u> AN	ABS	Only applies to the List Object Source (see the relevant section) function.	
		Searches for a value in the source code of an object: see SCAN in Navigation and Information commands and Syntax Diagrams below.	
<u>SC</u> REEN		When entered upon interruption of an object, the current screen output of the interrupted Natural object is displayed. ENTER takes you back to debug mode.	
<u>SE</u> T	BREAKPOINT BP	Invokes the Set Breakpoint menu.	
(syntax below)	CALL ON/OFF	Activates/deactivates the Call Statistics Maintenance as described in the relevant section.	
	<u>OBJ</u> ECT	Changes the default object defined for the Natural debugging utility. See also SET OBJECT in Navigation and Information.	
	WATCHPOINT WP	Invokes the Set Watchpoint menu.	
	XSTATISTICS ON/OFF/COUNT	Activates the statistics function about executed statements of Natural objects. See also Set Statement Execution Statistics in Statement Execution Statistics.	

Command	Subcommand(s)	Explanation
SM		Invokes the Spy Maintenance menu as described in the relevant section.
<u>STA</u> CK		Displays the contents of the entry at the top of the Natural stack: see STACK in Navigation and Information Commands.
<u>STE</u> P	[n]	Continues an interrupted Natural object for $n$ statement lines. The default value for $n$ is 1.
	<u>SK</u> IPSUBLEVEL	Continues step-mode processing of interrupted Natural objects without entering programs at sub-levels: see also SKIPSUBLEVEL in Execution Control Commands.
<u>STO</u> P		Terminates both the Natural Debugger and any interrupted Natural object; the NEXT line is displayed.
<u>SY</u> SVARS		Displays the current values of system variables (except the database-related system variables). See also Display Variables in Variable Maintenance.
TEST ON/OFF		Switches test mode on/off. Can also be entered at the NEXT command level.
WM		Invokes the Watchpoint Maintenance menu as described in the relevant section.

# **Syntax Diagrams**

The syntax diagrams listed below refer to more complex command sequences.

For a detailed explanation of the symbols used within the syntax descriptions, see the section System Command Syntax in the Natural System Command Reference documentation.

For better readability, synonymous keywords are omitted from the syntax diagrams below. An underlined portion of a keyword represents an acceptable abbreviation.

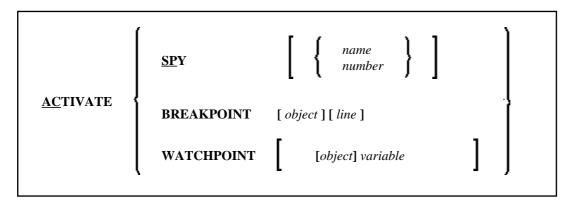
Valid synonyms are:

Keyword	Synonym
BREAKPOINT	BP
DEACTIVATE	DA
WATCHPOINT	WP

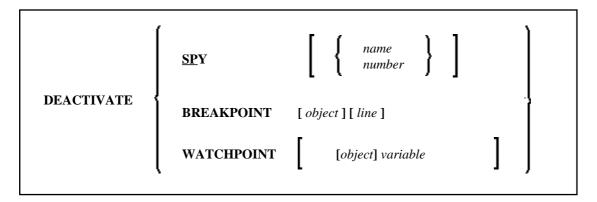
Below is information on:

- ACTIVATE
- DEACTIVATE
- DELETE
- DISPLAY
- LIST
- LOAD
- MODIFY
- PRINT
- RESET
- SAVE
- SET

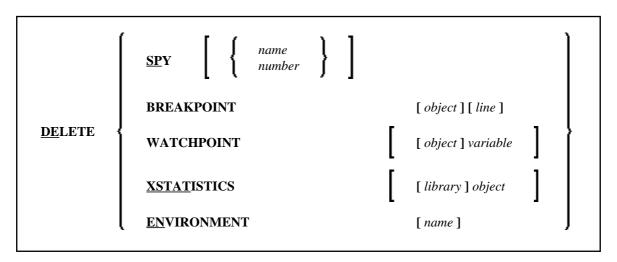
## **ACTIVATE**



#### **DEACTIVATE**

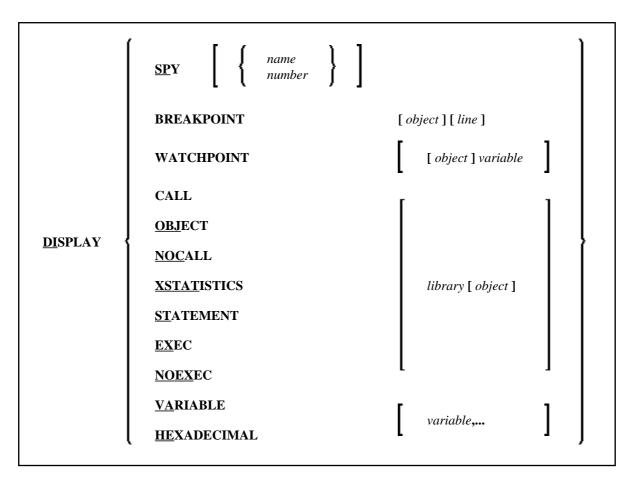


#### **DELETE**

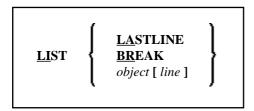


# **DISPLAY**

Command Summary and Syntax LIST



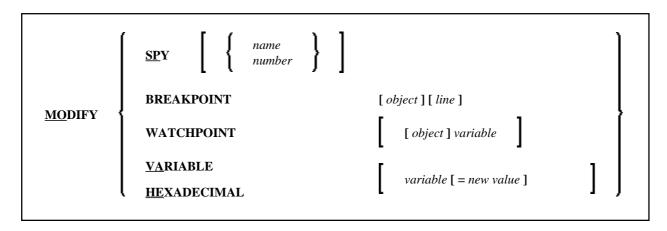
## LIST



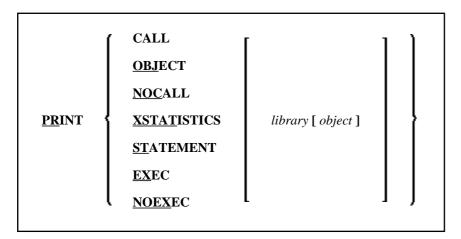
#### **LOAD**

**LOAD ENVIRONMENT** [ name ]

# **MODIFY**



## **PRINT**



#### **RESET**

RESET ENVIRONMENT [ name ]

#### **SAVE**

**SAVE ENVIRONMENT** [ name ]

#### **SET**

Command Summary and Syntax SET

